SIEMENS

March 2005

5WG1 562-2AB11

Binary Output UP 562/11 without physical external interface 2 x 230 V AC / 10 A

Product and Applications Description



The binary output UP 562/11 is a box mount switching actuator (60 mm Ø, depth 60 mm, a.s.o.). The box mount has to be covered with a universal-cover (ordering separately). Via its 2 outputs it can switch 2 separate groups of electric devices. The load circuits are connected via screwless connection blocks and the EIB bus line is connected via screwless plug-in connection blocks. The binary output UP 562/11 consists of the device (hardware) and its application programs (software).

The binary output UP 562/11 can be used e.g. for non-delayed on/off switching. time switch (non-delayed on, delayed off) or for delayed/non-delayed switching.

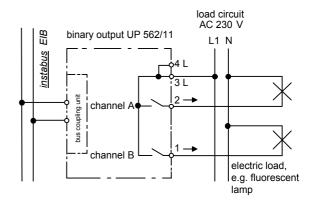
With the ETS (*EIB* Tool Software) the application program is selected, its parameters and addresses are assigned appropriately, and downloaded to the binary output UP 562/11.

Application Programs

20 A2 Actuator-BCU binary 901002

- 2 binary outputs
- · allows state to be read via the bus
- · allows on/off switching delay
- AND/OR logical operation available
- one positive drive at each output available
- characteristic in case of bus voltage failure and recurrence can be set in parameter list
- · allows one state report in case of state change
- timer function available

Example of Operation



Installation Instructions

• The device may be used for permanent interior installations in dry locations within box mounts.

- The device must be mounted and commissioned by an authorised electrician.
- A safety disconnection of the device must be possible.
- The device may be mounted to switch and socket combination box mounts if VDE-certified devices are used exclusively.
- The prevailing safety rules must be heeded.
- The device must not be opened.
- For planning and construction of electric installations, the relevant guidelines, regulations and standards of the respective country are to be considered.

Technical Specifications

Power supply

via bus line

Outputs

- number: 2 outputs (volt free contacts)
- rated voltage: AC 230 V, 47 ... 63 Hz
- rated current: 10 A resistive load
- switching current at AC 230 V: 0,01 ... 10 A resistive load
- switching current at DC 24 V:
 - 10 A resistive load
 - 4 A inductive load (L/R = 7 ms)
- switching characteristic: set in parameter list according to application program

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Switching power at AC 230 V

- at incandescent lamp load: max. 1000 W
- at fluorescent lamp (FL) load:
 - uncorrected FL, $\cos \varphi = 0.5$: max. 500 W
 - parallel corrected FL, cos ϕ = 1 (at C_{tot} <= 14 μ F): 2 x 58 W or 3 x 36 W or 6 x 18 W
 - twin-lamp circuit, $\cos \varphi = 1$: max. 1000 W
 - OSRAM ECG for 58 W FL : max. 10 units
 - OSRAM ECG for 36 W FL : max. 15 units
 - OSRAM ECG for 18 W FL : max. 20 units

Control elements

1 learning button:

for switching between normal operating mode and addressing mode

Display elements

1 red LED:

for monitoring bus voltage and displaying mode, selected with the learning button

Connections

- load circuit, physical: strip insulation for 9 ... 10 mm permissible conductor types/cross sections:
 - 0,5 ... 2,5 mm² single core or flexible conductor, 8 mm ultrasonically compacted
 - 0,5 ... 2,5 mm² flexible conductor with terminal pin, crimped on gas tight
 - 0,5 ... 1,5 mm² flexible conductor with connector sleeve
 - 1,0 and 1,5 mm² plain flexible conductor
- · load circuit, electrical:
 - plain flexible conductor, min. 1 mm²: current carrying capacity max. 6 A
 - all other conductors, min. 1,5 mm²: current carrying capacity max. 10 A



WARNING

When looping through the L-conductor (connection blocks 3 and 4), take care that the maximum connection current of 16 A (as governed by the maximum permissible printed conductor load) is not exceeded!

 bus line, pressure contacts on data rail Ø 0,6 ... 0,8 mm single core remove approx. 5mm of isolation

Physical specifications

- · housing: plastic
- dimensions
 - section size (W x H): 44 x 51 mm
 - mounting depth: 40 mm
 - weight: approx. 60 g
- fire load: approx. 991 kJ \pm 10 %
- installation: mounted in box mounts (60 mm Ø, depth 60 mm, a.s.o.)

Electrical safety

- Degree of pollution (according to IEC 60664-1): 2
- protection (according to EN 60529): IP 20
- overvoltage class (according to IEC 60664-1): III
- bus: safety extra low voltage SELV DC 24 V
- relay with µ-contact
- the device complies with EN 50090-2-2 and EN 60669-2-1

Reliability

20.000 switching cycles per contact

Electromagnetic compatibility

complies with EN 50081-1, EN 50082-2 and EN 50090-2-2

Environmental specifications

- climatic conditions: EN 50090-2-2
- ambient temperature operating: 5 ... + 45 °C
- ambient temperature non-op.: 25 ... + 70 ° C
- relative humidity (non-condensing): 5 % to 93 %

Certification

EIB certificate

CE norm

complies with the EMC regulations (residential and functional buildings), and low voltage regulations

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Location and Function of the Display and Operator Elements

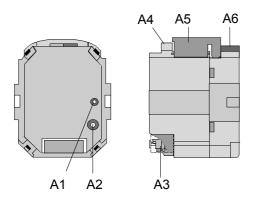


Figure 1: Location of the display and operator elements

- A1 LED for indicating normal operating mode (LED off) and addressing mode (LED on); upon receiving the physical address the device automatically returns to normal operating mode
- A2 Learning button for switching between normal operating mode and addressing mode for receiving
 - the physical address
- A3 Screwless plug-in connection blocks with measuring tap to connect load circuits
- A4 Clamping slots for anchoring the bus lines
- A5 Snap-on cover for bus cable and bus single cores
 A6 Bus clamp for single core conductors with 0.6...0.8 mm Ø

Mounting and Wiring

General description

The binary output UP 562/11 is built in box mounts (60 mm Ø, depth 60 mm, a.s.o.). The box mount has to be covered with a universal-cover (ordering separately), which is screwed upon the box mount. The binary output is connected to the bus line via the bus terminal block 193 (plug-in connection blocks screws for single core conductors).

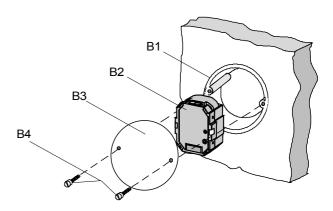


Figure 2: Mounting the binary output UP 562/11

- B1 box mount
- B2 binary output UP 562/11
- B3 universal-cover
- B4 mounting screws

Slipping off/on bus connection blocks (Figure 3)

 The bus connection block (C2) is situated on the top of the binary output UP 562/11 (C3). It consists of two components (C2.1 and C2.2) with four terminal contacts each. Take care not to damage the two test sockets (C2.3) by accidentally connecting them to the bus cable or with the screw-driver (e.g. when attempting to unplug the bus connection block).

Slipping off bus connection blocks (Figure 3)

- Insert the screw-driver from the side between the cover (C1) and the binary output (C3) and lever out the cover.
- Carefully put the screw driver to the wire-inserting slit of the bus connection block's grey component (C2.2) and pull the bus connection block (C2) from the binary output (C3).

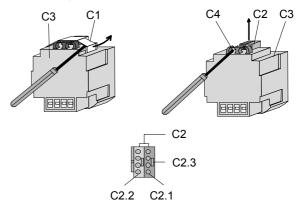


Figure 3: Mounting the binary output UP 562/11

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Note

Don't try to remove the bus connection block from the bottom side! There is a risk of shorting-out the device!

Connecting bus cables (Figure 4)

- The bus connection block (D2) can be used with single core conductors Ø 0,6 ... 0,8 mm.
- Remove approx. 25-35 mm of insulation from the sheathing of the bus cable (D1).
- Remove approx. 5 mm of insulation from the conductor (D3) and plug it into the bus connection block (D2) (red = +, grey = -).

Slipping on bus connection blocks (figure 3)

- Slip the bus connection block (C2) onto the guide slot of the binary output and
- press the bus connection block (C2) down to the stop.
- Press the sheathing of the cut-off insulation bus line (figure 4) projecting >3mm into the open clamping slot (C4). If a further bus line shall be connected break out the closed clamping slot with a screw-driver and press it into the clamping slot as described above. Press the single bus wires into the recess below the bus terminal block and snap on the cover (C1).

Disconnect bus lines (Figure 4)

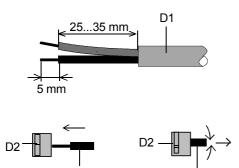


Figure 4: Mounting and dismounting a DIN-rail device

D3

Connecting load circuits (Figure 5)

D3

- The load circuits are connected via screwless plug-in terminals (E1).
- Remove approx. 9 to 10 mm of insulation from the wire (E2) and plug it into the terminal (E1).

Conductor cross sections:

- permissible conductor types/cross sections:
 - 0,5 ... 2,5 mm² single core or flexible conductor, 8 mm ultrasonically compacted
 - 0,5 ... 2,5 mm² flexible conductor with terminal pin, crimped on gas tight
 - 0,5 ... 1,5 mm² flexible conductor with connector sleeve
 - 1,0 and 1,5 mm² plain flexible conductor

Disconnect load circuits (Figure 5)

- Press the terminal lock (F2) of the connection block (F1) with a screw-driver and
- remove the wire (F3) from the terminal (F1).

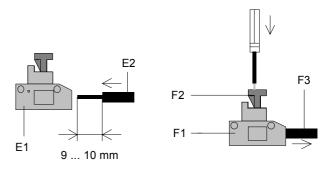
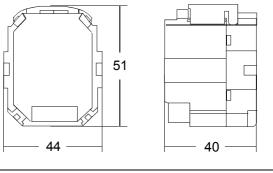


Figure 3: Connecting and disconnecting wires

Dimension Diagram

Dimensions in mm



General Notes

- Any faulty devices should be returned to the local Siemens office.
- If you have further questions about the product, please contact our Technical Support:
 - +49 (0) 180 50 50-222
 - +49 (0) 180 50 50-223
 - http://www.siemens.de/automation/support-request

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